Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A compound of the formula

and pharmaceutically acceptable salts, solvates, stereoisomers and prodrugs thereof, in isolation or in mixture, where independently at each occurrence:

R¹ and R² are selected from hydrogen, oxygen so as to form nitro or oxime, amino, -SO₃-R, and organic groups having 1-30 carbons and optionally containing 1-6 heteroatoms selected from nitrogen, oxygen, phosphorous, silicon, and sulfur, where R² may be a direct bond to numeral 3, or R¹ and R² may, together with the N to which they are both bonded, form a heterocyclic structure that may be part of an organic group having 1-30 carbons and optionally containing 1-6 heteroatoms selected from nitrogen, oxygen and silicon; or R¹ may be a 2 or 3 atom chain to numeral 2 so that -N-R¹- forms part of a fused bicyclic structure to ring A;

R³ and R⁴ are selected from direct bonds to 6 and 7 respectively so as to form carbonyl groups, hydrogen, or a protecting group such that R³ and/or R⁴ is part of hydroxyl or carbonyl protecting group;

numerals 1 through 17 each represent a carbon, where carbons at numerals 1, 2, 4, 11, 12, 15, 16 and 17 may be independently substituted with

- (a) one of: =O, $=C(R^5)(R^5)$, $=C=C(R^5)(R^5)$, $-C(R^5)(R^5)(C(R^5)(R^5))_n$ and $-(O(C(R^5)(R^5))_nO)$ wherein n ranges from 1 to about 6; or
- (b) two of the following, which are independently selected: -X, $-N(R^1)(R^2)$, $-R^5$ and $-OR^6$;

and where carbons at numerals 5, 8, 9, 10, 13 and 14 may be independently substituted with one of -X, -R⁵, -N(R¹)(R²) or -OR⁶;

in addition to the -OR³ and -OR⁴ groups as shown, each of carbons 6 and 7 may be independently substituted with one of -X, -N(R¹)(R²), -R⁵ or -OR⁶;

each of rings A, B, C and D is independently fully saturated, partially saturated or fully unsaturated;

R⁵ at each occurrence is independently selected from H, X, and C₁₋₃₀ organic moiety that may optionally contain at least one heteroatom selected from the group consisting of boron, halogen, nitrogen, oxygen, silicon and sulfur; where two geminal R⁵ groups may together form a ring with the carbon atom to which they are both bonded;

R⁶ is H or a protecting group such that -OR⁶ is a protected hydroxyl group, where vicinal -OR⁶ groups may together form a cyclic structure that protects vicinal hydroxyl groups, and where geminal -OR⁶ groups may together form a cyclic structure that protects a carbonyl group; and

X represents fluoride, chloride, bromide and iodide.

2. (Original) A compound of claim 1 wherein

numerals 1 through 16 each represent a carbon, where carbons at numerals 1, 2, 4, 11, 12, 15 and 16 may be independently substituted with

- (a) one of: =O, $=C(R^5)(R^5)$, $=C=C(R^5)(R^5)$, $-C(R^5)(R^5)(C(R^5)(R^5))_n$ and $-(O(C(R^5)(R^5))_nO)$ wherein n ranges from 1 to about 6; or
- (b) two of the following, which are independently selected: -X, $-N(R^1)(R^2)$, $-R^5$ and $-OR^6$; and

numeral 17 represents a carbon substituted with

- (a) one of: $=C(R^{5a})(R^{5a})$, $=C=C(R^{5a})(R^{5a})$, and
- -C(R^{5a})(R^{5a})(C(R^{5a})(R^{5a}))_n- wherein n ranges from 1 to about 6 ; or
- (b) two of the following, which are independently selected: -X, $-N(R^1)(R^2)$, and $-R^{5a}$;

where R^{5a} at each occurrence is independently selected from H, X, and C₁.

30 organic moiety that may optionally contain at least one heteroatom selected from the group consisting of boron, halogen, nitrogen, silicon and sulfur; where two geminal R⁵ groups may together form a ring with the carbon atom to which they are both bonded.

- 3. (Original) A compound of claim 2 wherein R^{5a} at each occurrence is independently selected from C_{1-30} hydrocarbon, C_{1-30} halocarbon, C_{1-30} hydrohalocarbon, H, and X.
- 4. (Original) A compound of claim 2 wherein R^{5a} at each occurrence is independently selected from C_{1-10} hydrocarbon, C_{1-10} halocarbon, C_{1-10} hydrohalocarbon, H, and X.
- 5. (Currently Amended) A compound of any of <u>claim 1</u> <u>claims 1-4</u> wherein R¹ and R² are selected from hydrogen, oxygen so as to form nitro or oxime, amino, -SO₃-R, and organic groups having 1-30 carbons and optionally containing 1-6 heteroatoms selected from oxygen, phosphorous, silicon, and sulfur, where R² may be a direct bond to numeral 3, or R¹ and R² may, together with the N to which they are both bonded, form a heterocyclic structure that may be part of an organic group having 1-30 carbons and optionally containing 1-6 heteroatoms selected from oxygen and silicon; or R¹ may be a 2 or 3 atom chain to numeral 2 so that –N-R¹-forms part of a fused bicyclic structure to ring A.
- 6. (Currently Amended) A compound of any of <u>claim 1</u> <u>claims 1-5</u> wherein carbons at numerals 1, 2, 4, 11, 12, 15 and 16 are each substituted with two hydrogens unless said carbon is part of an unsaturated bond;

bond.

bond;

carbons at numerals 5, 8, 9 and 14 are each substituted with one hydrogen unless said carbon is part of an unsaturated bond;

carbon at numeral 10 is substituted with methyl; and carbon at number 13 is substituted with methyl unless it is part of an unsaturated bond.

7. (Currently Amended) A compound of any of <u>claim 1</u> <u>claims 1-6</u> wherein carbons at numerals 1, 2, 4, 11, 12, 15 and 16 are each substituted with two hydrogens;

carbons at numerals 5, 8, 9 and 14 are each substituted with one hydrogen; carbon at numeral 10 is substituted with methyl; and carbon at number 13 is substituted with methyl unless it is part of an unsaturated

8. (Original) A compound of claim 1 wherein R¹ and R² are hydrogen:

R³ and R⁴ are selected from direct bonds to 6 and 7 respectively so as to form carbonyl groups, hydrogen, or a protecting group such that R³ and/or R⁴ is part of hydroxyl or carbonyl protecting group; and in addition to the -OR³ and -OR⁴ groups as shown, each of carbons 6 and 7 is substituted with hydrogen unless precluded because -OR³ or -OR⁴ represent a carbonyl group;

carbons at numerals 1, 2, 4, 11, 12, 15 and 16 are each substituted with two hydrogens unless said carbon is part of an unsaturated bond;

carbons at numerals 5, 8, 9 and 14 are each substituted with one hydrogen unless said carbon is part of an unsaturated bond;

carbon at numeral 10 is substituted with methyl;

carbon at number 13 is substituted with methyl unless it is part of an unsaturated

carbon at numeral 17 is substituted with

- (a) one of: =O, =C(R⁵)(R⁵), =C=C(R⁵)(R⁵), -C(R⁵)(R⁵)(C(R⁵)(R⁵))_n-and -(O(C(R⁵)(R⁵))_nO)- wherein n ranges from 1 to about 6; or
- (b) two of the following, which are independently selected: -X, $-N(R^1)(R^2)$, $-R^5$ and $-OR^6$;

each of rings A, B, C and D is independently fully saturated, partially saturated or fully unsaturated;

R⁵ at each occurrence is independently selected from H, X, and C₁₋₃₀ organic moiety that may optionally contain at least one heteroatom selected from the group consisting of boron, halogen, nitrogen, oxygen, silicon and sulfur; where two geminal R⁵ groups may together form a ring with the carbon atom to which they are both bonded;

R⁶ is H or a protecting group such that -OR⁶ is a protected hydroxyl group, where vicinal -OR⁶ groups may together form a cyclic structure that protects vicinal hydroxyl groups, and where geminal -OR⁶ groups may together form a cyclic structure that protects a carbonyl group; and

X represents fluoride, chloride, bromide and iodide.

9. (Original) A compound of claim 8 wherein R¹ and R² are hydrogen;

R³ and R⁴ are selected from hydrogen and protecting groups such that R³ and/or R⁴ is part of hydroxyl protecting group;

carbons at numerals 1, 2, 4, 11, 12, 15 and 16 are each substituted with two hydrogens;

carbons at numerals 5, 8, 9 and 14 are each substituted with one hydrogen; carbon at numeral 10 is substituted with methyl;

carbon at number 13 is substituted with methyl unless it is part of an unsaturated bond;

carbon at numeral 17 is substituted with

- (a) one of: $=C(R^5)(R^5)$ and $=C=C(R^5)(R^5)$; or
- (b) two of the following, which are independently selected: -X, $-N(R^1)(R^2)$, and $-R^5$;

each of rings A, B, C and D is independently fully saturated or partially saturated; R⁵ at each occurrence is independently selected from H, X, and C₁₋₃₀

hydrocarbons, halocarbons and halohydrocarbons; and

X represents fluoride, chloride, bromide and iodide.

10. (Original) A compound of claim 9 wherein

R¹ and R² are hydrogen;

R³ and R⁴ are selected from hydrogen and protecting groups such that R³ and/or R⁴ is part of hydroxyl protecting group;

carbons at numerals 1, 2, 4, 11, 12, 15 and 16 are each substituted with two hydrogens;

carbons at numerals 5, 8, 9 and 14 are each substituted with one hydrogen; carbon at numeral 10 is substituted with methyl;

carbon at number 13 is substituted with methyl unless it is part of an unsaturated

bond;

and

carbon at numeral 17 is substituted with

- (a) one of: $=C(R^5)(R^5)$; or
- (b) two of $-R^5$;

each of rings A, B, C and D is independently fully saturated or partially saturated;

 R^{5} at each occurrence is independently selected from H and $C_{\text{1-10}}$ hydrocarbons.

11-16. (Canceled)

- 17. (Original) A compound of claim 1 wherein 17 is substituted with $=C(R^5)(R^5)$ and R^5 is selected from hydrogen, halogen, C_{1-6} alkyl, C_{1-6} hydroxyalkyl, and $-CO_2-C_{1-6}$ alkyl.
- 18. (Original) A compound of claim 1 wherein 17 is substituted with C_{1-6} alkyl or C_{1-6} haloalkyl.

- 19. (Original) A compound of claim 1 wherein 17 is substituted with -OR⁶ or =O, wherein R⁶ is hydrogen.
- 20. (Original) A compound of claim 1 wherein R^1 is selected from $-C(=O)-R^7$, $-C(=O)NH-R^7$; $-SO_2-R^7$; wherein R^7 is selected from alkyl, heteroalkyl, aryl and heteroaryl.
- 21. (Original) A compound of claim 20 wherein R^7 is selected from C_{1-10} hydrocarbyl.
 - 22. (Original) A compound of claim 20 wherein R⁷ comprises biotin.
 - 23. (Original) A compound of claim 1 wherein (R¹)(R²)N- is selected from

- 24. (Original) A compound of claim 1 wherein R¹ is hydrogen and R² comprises a carbocycle.
 - 25. (Original) A compound of claim 24 wherein the carbocycle is phenyl.
- 26. (Original) A compound of claim 25 wherein R² is selected from 3-methylphenyl; 4-hydroxyphenyl; and 4-sulfonamidephenyl.
- 27. (Original) A compound of claim 1 wherein R^1 is hydrogen and R^2 comprises a $C_{1.10}$ hydrocarbyl.

- 28. (Original) A compound of claim 1 wherein R¹ is hydrogen and R² is heteroalkyl.
- 29. (Original) A compound of claim 28 wherein R^2 is selected from C_{1-10} alkyl-W- C_{1-10} alkylene- wherein W is selected from O and NH; HO- C_{1-10} alkylene-; and HO- C_{1-10} alkylene-W- C_{1-10} alkylene- where W is selected from O and NH.
- 30. (Original) A compound of claim 1 wherein R^1 is hydrogen and R^2 is CH_2 - R^7 wherein R^7 is selected from alkyl, heteroalkyl, aryl and heteroaryl.
- 31. (Original) A compound of claim 30 wherein R⁷ is selected from alkyl-substituted phenyl; halogen-substituted phenyl; alkoxy-substituted phenyl; aryloxy-substituted phenyl; and nitro-substituted phenyl.
- 32. (Original) A compound of claim 1 wherein each of R¹ and R² is hydrogen.
- 33. (Currently Amended) A compound of <u>claim 1</u> elaims 1 or 32 wherein each of \mathbb{R}^3 and \mathbb{R}^4 is hydrogen.
- 34. (Currently Amended) A compound of <u>claim 33</u> elaims 32 or 33 where the carbon at numeral 17 is substituted with
- (a) one of the following: $C(R^{5a})(R^{5a})$, $=C=C(R^{5a})(R^{5a})$, and $-C(R^{5a})(R^{5a})(C(R^{5a})(R^{5a}))_n$ wherein n ranges from 1 to about 6; or
- (b) two of the following, which are independently selected: -X, $-N(R^1)(R^2)$, and $-R^{5a}$;

where R^{5a} at each occurrence is independently selected from H, X, and C_{1-30} organic moiety that may optionally contain at least one heteroatom selected from the group consisting of boron, halogen, nitrogen, silicon and sulfur; where two geminal R^5 groups may together form a ring with the carbon atom to which they are both bonded.

35. (Original) A compound of claim 1 wherein R³ and R⁴ together form a ketal of the structure

36. (Original) A compound of claim 1 wherein -OR³ and -OR⁴ have the stereochemistry shown

- 37. (Original) A compound of claim 1 wherein $-N(R^1)(R^2)$ is in a salt form.
- 38. (Original) A compound of claim 1 wherein $-N(R^1)(R^2)$ is in a salt form and the salt is a halogen or acetate salt.
- 39. (Original) A compound of claim 1 which is a prodrug of the formula shown in claim 1.
- 40. (Original) A compound of claim 1 and pharmaceutically acceptable salts, solvates, stereoisomers but not prodrugs thereof, in isolation or in mixture.

- 41. (Original) A compound of claim 1 wherein at least one of the carbons at numerals 10 and 13 are substituted with methyl.
- 42. (Original) A compound of claim 1 wherein each of R¹ and R² are independently selected from hydrogen and organic groups having 1-20 carbons and optionally containing 1-5 heteroatoms selected from nitrogen, oxygen, silicon, and sulfur.
 - 43. (Original) A compound of claim 1 wherein

R¹ and R² are independently selected from hydrogen, R⁸, R⁹, R¹⁰, R¹¹ and R¹² where R⁸ is selected from alkyl, heteroalkyl, aryl and heteroaryl; R⁹ is selected from (R⁸)_r-alkylene, (R⁸)_r-heteroalkylene, (R⁸)_r-arylene and (R⁸)_r-heteroarylene; R¹⁰ is selected from (R⁹)_r-alkylene, (R⁹)_r-heteroalkylene, (R⁹)_r-arylene, and (R⁹)_r-heteroarylene; R¹¹ is selected from (R¹⁰)_r-alkylene, (R¹⁰)_r-heteroalkylene, (R¹⁰)_r-arylene, and (R¹⁰)_r-heteroarylene, R¹² is selected from (R¹¹)_r-alkylene, (R¹¹)_r-heteroalkylene, (R¹¹)_r-arylene, and (R¹¹)_r-heteroarylene, and r is selected from 0, 1, 2, 3, 4 and 5, with the proviso that R¹ and R² may join to a common atom so as to form a ring with the common atom.

44. (Currently Amended) A compound of claim 43 claims 1 or 43 wherein R³ and R⁴ are selected from hydrogen and protecting groups such that R³ and/or R⁴ is part of hydroxyl protecting group;

carbons at numerals 1, 2, 4, 11, 12, 15 and 16 are each substituted with two hydrogens unless said carbon is part of an unsaturated bond;

carbons at numerals 5, 8, 9 and 14 are each substituted with one hydrogen unless said carbon is part of an unsaturated bond;

carbon at numeral 10 is substituted with methyl;

carbon at number 13 is substituted with methyl unless it is part of an unsaturated bond;

carbon at numeral 17 is substituted with

- (a) one of: $=C(R^5)(R^5)$ and $=C=C(R^5)(R^5)$; or
- (b) two of $-R^5$;

each of rings A, B, C and D is independently fully saturated or partially saturated; and

 R^5 at each occurrence is independently selected from H and C_{1-10} hydrocarbons.

- wherein R^1 and R^2 are independently selected from hydrogen, R^8 , R^9 , R^{10} , R^{11} and R^{12} where R^8 is selected from C_{1-10} alkyl, C_{1-10} heteroalkyl comprising 1, 2 or 3 heteroatoms, C_{6-10} aryl and C_{3-15} heteroaryl comprising 1, 2 or 3 heteroatoms; R^9 is selected from $(R^8)_r$ - C_{1-10} alkylene, $(R^8)_r$ - C_{1-10} heteroalkylene comprising 1, 2 or 3 heteroatoms, $(R^8)_r$ - C_{6-10} arylene and $(R^8)_r$ - C_{3-15} heteroarylene comprising 1, 2 or 3 heteroatoms; R^{10} is selected from $(R^9)_r$ - C_{1-10} alkylene, $(R^9)_r$ - C_{1-10} heteroalkylene comprising 1, 2 or 3 heteroatoms, $(R^9)_r$ - C_{6-10} arylene, and $(R^9)_r$ - C_{3-15} heteroarylene comprising 1, 2 or 3 heteroatoms; $(R^{10})_r$ - (R^{10})
- 46. (Currently Amended) A compound of <u>claim 45</u> <u>claims 1, 43 or 44</u> wherein R¹ and R² are selected from hydrogen, CH₃-, CH₃(CH₂)₂-, CH₃(CH₂)₄-, CH₃CO-, C₆H₅CO- (CH₃)₂CHSO₂-, C₆H₅SO₂-, C₆H₅NHCO-, CH₃(CH₂)₂NHCO-, CH₃(CH₂)₂NHCO-, CH₃(CH₂)₂NHCO-, CH₃(CH₂)₂-, (CH₃)₂N(CH₂)₂-, HOCH₂CH₂-, HOCH₂(CH₂)₄-, HOCH₂CH₂NHCH₂CH₂-, 3-(CH₃)C₆H₄-, 4-(HO)C₆H₄-, 4-(H₂NSO₂)C₆H₄-, 4-((CH₃)₂CH)C₆H₄-CH₂-, 2-(F)C₆H₄-CH₂-, 3-(CF₃)C₆H₄-CH₂-, 2-(CH₃O)C₆H₄-CH₂-, 4-(CF₃O)C₆H₄-CH₂-, 3-(C₆H₅O)C₆H₄-CH₂-, 3-(NO₂)C₆H₄-CH₂-,

Application No. 10/624,946

; or R¹ and R² may join together with the nitrogen to which they are both attached and form a heterocycle selected from:

47. (Currently Amended) A compound of <u>claim 1</u> elaims 1 or 43 of the formula

48. (Currently Amended) A compound of <u>claim 1</u> elaims 1 or 43 of the formula

49. (Currently Amended) A compound of <u>claim 1</u> elaims 1 or 43 of the formula

50. (Currently Amended) A compound of <u>claim 1</u> elaims 1 or 43 of the formula

51. (Original) A compound of claim 1 wherein R¹ is a 2, or 3 atom chain to numeral 2 so that -N-R¹- forms part of a fused bicyclic structure to ring A, the compound having the formula:

where Z represents 2 or 3 atoms, independently selected from C, N and O so long as a stable structure results, and the ring including Z may be saturated or unsaturated.

52. (Original) A compound of claim 51 selected from

- 53. (Currently Amended) A pharmaceutical composition comprising a compound of any of <u>claim 1 elaims 1-52</u> and a pharmaceutically acceptable carrier, excipient or diluent.
- 54. (Currently Amended) A method of treating inflammation therapeutically comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of <u>claim 1</u> <u>claims 1-52</u>.

- 55. (Currently Amended) A method of treating inflammation prophylactically comprising administering to a subject in need thereof a prophylactically-effective amount of a compound of any of <u>claim 1 elaims 1-52</u>.
- 56. (Currently Amended) A method of treating asthma comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of claim 1 claims 1-52.
- 57. (Currently Amended) A method of treating allergic disease including but not limited to dermal and ocular indications comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of claim 1 claims 1-52.
- 58. (Currently Amended) A method of treating chronic obstructive pulmonary disease comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of claim 1 claims 1-52.
- 59. (Currently Amended) A method of treating atopic dermatitis comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of claim 1 claims 1-52.
- 60. (Currently Amended) A method of treating solid tumours comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of <u>claim 1 elaims 1-52</u>.
- 61. (Currently Amended) A method of treating AIDS comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of claim 1 claims 1-52.

- 62. (Currently Amended) A method of treating ischemia reperfusion injury comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of <u>claim 1</u> <u>claims 1-52</u>.
- 63. (Currently Amended) A method of treating cardiac arrhythmias comprising administering to a subject in need thereof a therapeutically-effective amount of a compound of any of claim 1 claims 1-52.